General

Guideline Title

Depression.

Bibliographic Source(s)

Singapore Ministry of Health. Depression. Singapore: Singapore Ministry of Health; 2012 Jan. 87 p. [174 references]

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Singapore Ministry of Health. Depression. Singapore: Singapore Ministry of Health; 2004 Mar. 54 p.

Regulatory Alert

FDA Warning/Regulatory Alert

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- August 31, 2016 – Opioid pain and cough medicines combined with benzodiazepines : A U.S. Food and Drug Administration (FDA) review has found that the growing combined used of opioid medicines with benzodiazepines or other drugs that depress the central nervous system (CNS) has resulted in serious side effects, including slowed or difficult breathing and deaths. FDA is adding Boxed Warnings to the drug labeling of prescription opioid pain and prescription opioid cough medicines and benzodiazepines.

Recommendations

Major Recommendations

Definitions of the level of evidence (1++, 1+, 1-, 2++, 2+, 2-, 3, 4) and the grades of recommendations (A, B, C, D, GPP) are defined at the end of the "Major Recommendations" field.

Clinical Evaluation

D - The basic assessment of depression includes the history, the mental state examination and physical examination.

- Take a detailed history of the presenting symptoms and determine the severity and duration of the depressive episode. Establish history of

prior episodes, prior manic or hypomanic episodes, substance abuse and other psychiatric illnesses. Look out for coexisting medical conditions. Check for family history of mental illness, depression and suicide. Establish the personal history and the available supports and resources. Evaluate functional impairment and determine life events and stressors.

- Do a mental state examination. This includes an evaluation of the severity of symptoms and assessment for psychotic symptoms. All assessments of depression will include an assessment of the risk of suicide, self-harm and risk of harm to others (see Annex II in the original guideline document).
- Do a physical examination to exclude a medical or surgical condition.
- Laboratory testing may be indicated if there is a need to rule out medical conditions that may cause similar symptoms.

(Grade D, Level 4)

D - Screening for depression may be beneficial when it is done in high-risk populations (such as individuals with significant physical illnesses causing disability) where the benefits outweigh the risks. (Grade D, Level 4)

C - The Patient Health Questionnaire 9 (PHQ-9) may be used to screen for depression in primary care. (Grade C, Level 2+)

D - Referrals to a specialist are warranted when:

- There are co-morbid medical conditions for which expertise is required regarding drug-drug interactions
- There is diagnostic difficulty
- One or two trials of medication have failed
- Augmentation or combination therapy is needed
- There are co-morbid substance abuse or severe psychosocial problems
- Psychotic symptoms are present
- Specialised treatment like electroconvulsive therapy is indicated

(Grade D, Level 4)

Principles of Treatment

GPP - Consider using the Clinical Global Impression scales (both severity and improvement component scales) to measure illness severity and treatment progress during consultations. (GPP)

Pharmacotherapy

A - Antidepressants should be recommended as a first-line treatment in patients with moderate to severe depression, or sub-threshold depression that has persisted for 2 years or more. (Grade A, Level 1+)

D - Antidepressants are a treatment option in short duration mild depression in adults and should be considered if there is a history of moderate to severe recurrent depression or if the depression persists for more than 2–3 months. (Grade D, Level 4)

D - If the patient has previously responded well to and has had minimal side-effects with a drug, that drug is preferred. Alternatively, if the patient has previously failed to respond to an adequate trial of one antidepressant or found the side-effects of an antidepressant intolerable, that medication should generally be avoided. (Grade D, Level 4)

A - Once an antidepressant has been selected, start with a low dose and titrate gradually to the full therapeutic dose, while assessing patients' mental state and watching for side-effects. The frequency of monitoring depends on the severity of the depression, suicide risk, the patient's cooperation and the availability of social support. (Grade A, Level 1+)

A - A selective serotonin reuptake inhibitor (SSRI) antidepressant should be used as a first-line medication for treating depression, due to its favourable risk-benefit ratio, greater tolerability and safety in overdose. (Grade A, Level 1++)

A - SSRI antidepressants should be prescribed as a first line medication for depression in patients with concomitant cardiovascular diseases due to their favourable risk-benefit ratio. (Grade A, Level 1++)

A - The "newer" antidepressants can also be considered as other first-line options for treating depression. They include:

- Serotonin and norepinephrine reuptake inhibitors (SNRI) (e.g., venlafaxine)
- Noradrenergic and specific serotonergic antidepressants (NaSSA) (e.g., mirtazapine)
- Norepinephrine and dopamine reuptake inhibitors (NDRI) (e.g., bupropion)

(Grade A, Level 1+)

D - Where there are interactions with other drugs, use of escitalopram or sertraline should be considered as they have fewer propensities for interactions, appear to be safe and possibly protective of further cardiac events. (Grade D, Level 4)

A - Due to their cardiotoxic adverse effect risks, tricyclic antidepressants (TCA) should be avoided in patients at high risk of cardiovascular disease, arrhythmias and cardiac failure. (Grade A, Level 1++)

A - Older tricyclic antidepressants and monoamine oxidase inhibitors (MAOIs) should be reserved for situations when first-line medication treatment has failed. (Grade A, Level 1+)

B - A new class of antidepressants, known as melatonin agonists, e.g., agomelatine, may also be considered as an alternative treatment option for depression, if first-line medication is unsuitable or has failed. (Grade B, Level 1+)

D - When an antidepressant is to be prescribed, tailor it to the patient with depression and a chronic physical health problem, and take into account the following:

- The presence of additional physical health disorders
- The side effects of antidepressants, which may impact on the underlying physical disease (in particular, selective serotonin reuptake inhibitors may result in or exacerbate hyponatraemia, especially in older people)
- Interactions with other medications

(Grade D, Level 3)

C - The emergence of suicidal thinking and behaviour, or unusual changes in behaviour, should be monitored during the early phases (generally the first 1-2 months) of antidepressant treatment, especially in children, adolescents and young adults between 18 to 24 years old. (Grade C, Level 2+)

A - Initial and short-term (2-4 week) usage of a benzodiazepine together with an antidepressant may be considered where anxiety, agitation and/or insomnia becomes problematic to patients with depression. (Grade A, Level 1++)

C - All antidepressants, once started, should be continued for at least 4 to 6 weeks. (Grade C, Level 2+)

A - Patients with first episode of depression without psychotic symptoms should be treated with antidepressants at full treatment dose for 6-9 months after remission of symptoms. (Grade A, Level 1++)

B - Patients who have a second episode of depression should be maintained on treatment for 1-2 years - the duration may depend on the risk factors for recurrence and the patient preference. (Grade B, Level 1+)

C - Patients with more than two episodes of depression should be maintained on treatment for 2 years or longer, or even lifelong - the duration may depend on the risk factors for recurrence and the patient preference. (Grade C, Level 2+)

GPP - Maintenance antidepressant treatment should be carried on for as long as necessary. (GPP)

B - Using higher antidepressant doses may be helpful for patients who have shown a partial response and when only low or modest doses have been tried. The patient should be closely monitored for side-effects with the increase in dose. (Grade B, Level 2++)

B - Switching is preferred to augmentation as an initial strategy in accordance with general principles that combinations should preferably not be used when monotherapy will suffice. (Grade B, Level 2++)

A - Both switching within the class (i.e., from a SSRI to another), as well as switching from a SSRI to a different class of antidepressants, may be done as both have been found beneficial. (Grade A, Level 1++)

GPP - When switching medications, clinicians should be vigilant for the onset of drug-drug interactions (e.g., serotonin syndrome) and drug discontinuation reaction. (GPP)

A - Lithium augmentation and thyroid hormone augmentation (using levothyroxine or triiodothyronine) are two traditional augmentation strategies that may be used for patients who have had previous antidepressant trials and have not responded to adequate trials of other individually prescribed antidepressants. (Grade A, Level 1++)

A - When discontinuing antidepressants, antidepressants should be gradually tapered off instead of suddenly stopped, to reduce side effects of discontinuation. (Grade A, Level 1++)

Psychotherapy

A - Psychotherapy alone is as efficacious as antidepressant medication in patients with mild to moderate major depression and may be used as first-line treatment. (Grade A, Level 1++)

A - Cognitive-behavioural therapy is recommended when the depressed patient has distorted negative thoughts. (Grade A, Level 1++)

B - Cognitive-behavioural therapy is also an effective maintenance treatment and is recommended for patients with recurrent depression who are no longer on medication. (Grade B, Level 1+)

Interpersonal Therapy

B - Interpersonal therapy is recommended for depressed patients with interpersonal difficulties. (Grade B, Level 1+)

A - Psychodynamic-interpersonal therapy is a viable alternative treatment for depressed patients with interpersonal difficulties. (Grade A, Level 1+)

A - Long-term psychodynamic psychotherapy is recommended for depressed patients with co-morbid personality disorder. (Grade A, Level 1++)

A - Problem-solving therapy is recommended for primary care patients with mild depression. (Grade A, Level 1++)

A - Cognitive-behavioural therapy or psychodynamic interpersonal therapy should be delivered for a longer period (i.e., 16 weeks or longer) when the depression is severe. (Grade A, Level 1+)

D - If a moderate improvement, at least, is not observed after 4-8 weeks of psychotherapy, a thorough review of the diagnosis, complicating conditions and issues, and treatment plan should be conducted. If there is no response, consider adding or changing to medication. If there is partial response, consider changing the intensity of psychotherapy, changing the type of psychotherapy, or adding or changing to medication. (Grade D, Level 4)

Psychoeducation and Family Intervention

A - The following should be done:

a. Educating the patient about the illness helps clarify uncertainty and misconceptions. Depression should be explained as a medical illness that is associated with changes in neurochemicals and brain functioning.
b. Adequate follow-up improves treatment adherence, allows closer monitoring and earlier detection of changes in condition.
c. Discuss the type and duration of treatment. If antidepressants are used it is advisable to explain that they are not addictive. Provide information on the different types of antidepressants available and about the possible side-effects.
d. Advise on lifestyle changes such as exercise and reducing stress.

(Grade A, Level 1++)

GPP - Where indicated and with patients' agreement, involve family members or friends in the care of people with depression so that there is adequate support. (GPP)

A - Marital or couple therapy is effective and should be considered for patients with significant marital distress. (Grade A, Level 1+)

Electroconvulsive Therapy

A - Electroconvulsive therapy is an effective short-term treatment for major depressive disorder and should be considered in patients who have not responded to antidepressant therapy. (Grade A, Level 1++)

A - Patients should be maintained on antidepressants following a successful response to electroconvulsive therapy. (Grade A, Level 1+)

D - Electroconvulsive therapy may be considered as a first-line treatment for severely depressed patients with severe psychomotor retardation (associated with food refusal leading to nutritional compromise and dehydration), active suicidality and psychotic features. (Grade D, Level 3)

D - Electroconvulsive therapy may also be considered in situations when a particularly rapid antidepressant response is required, such as in pregnancy and in those with comorbid medical conditions that preclude the use of antidepressant medications. (Grade D, Level 3)

Depression in Children and Adolescents

D - Self-administered rating scales (or questionnaires) should not be used for diagnosis, but may be used for screening of symptoms, assessing severity and monitoring improvement in older children and adolescents. (Grade D, Level 4)

D - When faced with a suicidal adolescent, doctors should maintain contact, ensure close supervision and engage support systems such as family and school, and consider a "no harm" contract if the adolescent is willing. (Grade D, Level 4)

D - Hospitalization is indicated if suicide risk is high, support is unavailable and there are severe symptoms of depression. (Grade D, Level 4)

A - Psychosocial interventions are recommended in initial treatment of depression in children and adolescents based on the literature and local clinical experience. (Grade A, Level 1++)

D - Medication should not be the only treatment given to children and adolescents with depression but care should be given to increasing self esteem, coping skills to handle stress, adapting to the changes in life and improving relationships between family members and peers. Use of medications should be cautious and not necessarily first-line treatment for major depressive disorder. (Grade D, Level 3)

D - Medications are usually indicated for children and adolescents with severe depression, who have psychotic symptoms or who have failed psychotherapy. (Grade D, Level 4)

C - SSRIs should be used with caution in children and adolescents. (Grade C, Level 2+)

A - Combination of psychosocial interventions and SSRIs may be considered for moderate to severe depression in children and adolescents. (Grade A, Level 1++)

A - Other antidepressants such as venlafaxine may be considered as second line treatment of depression in children and adolescents. (Grade A, Level 1++)

GPP - Referral of a child or adolescent with depression to a psychiatrist could be considered in any of the following situations:

- Failure to improve with psychosocial interventions or requiring specialised psychological interventions
- Failure to improve after at least 4 weeks of medication treatment at maximum tolerated dose
- Severe symptoms such as clear suicidal intention, disruptive psychotic symptoms

(GPP)

Depression in Pregnancy

C - Consider using these two questions to effectively identify possible depression in pregnant and postpartum women:

1. "During the past month, have you often been bothered by feeling down, depressed or hopeless?"
2. "During the past month, have you often been bothered by having little interest or pleasure in doing things?"
   If the woman answers "yes" to either question, consider asking this: "Is this something you feel you need or want help with?"

(Grade C, Level 2+)

D - It is strongly recommended that specialist psychiatric care be arranged for pregnant or postpartum women with:

- Past or present severe mental illness including schizophrenia, bipolar disorder, psychosis in the postnatal period and severe depression
- Previous treatment by a psychiatrist/specialist mental health team including inpatient care
- A family history of maternal perinatal mental illness

(Grade D, Level 4)

D - Psychological therapies (including non-directive counselling and support) should be maximised as the first-line treatment strategy for peripartum depression and medication should be considered only in severe depression. (Grade D, Level 4)

D - Early referral to a specialist with expertise in perinatal mental health is recommended for women with new-onset peripartum depression, unless it is mild. (Grade D, Level 4)

D - Abrupt cessation of antidepressant medication for women with preexisting depression can precipitate withdrawal symptoms that can be distressing. It is preferable to advise patients to reduce antidepressant dose to half first whilst arranging for referral. (Grade D, Level 4)

D - Early referral to a psychiatrist with expertise in perinatal mental health is recommended for women with peripartum depression and preexisting

depressive illness. (Grade D, Level 4)

Depression in the Elderly

D - Referrals of elderly patients to specialists should be considered:

- When the diagnosis is in doubt
- When the depression is severe (as evidenced by psychotic depression, severe risk to health because of failure to eat or drink and suicidal risk)
- When complex therapy is indicated as in cases with medical comorbidity
- When the patient does not respond to an adequate antidepressant trial

(Grade D, Level 4)

A - Antidepressants are recommended in dysthymia as well as for mild to severe depression in the elderly. There is no difference in efficacy between the classes of antidepressants in the treatment of the elderly. (Grade A, Level 1++)

A - SSRIs are recommended over tricyclic antidepressants (TCAs) as the first-line treatment choice for late-life depression. (Grade A, Level 1++)

B - In frail elderly patients it is advisable to "start low, go slow". In the acute phase at least six weeks of treatment may be needed to achieve optimal therapeutic effect. (Grade B, Level 1+)

B - For frail elderly patients, a continuation period on the same dosage that improved them for 12 months is recommended for a first onset of major depression, longer for a recurrent episode. The duration of treatment is similar to the adult age group in the continuation and maintenance phases. (Grade B, Level 1+)

B - Psychological interventions should be provided for the elderly with mild to moderate major depression. (Grade B, Level 1+)

B - In severe major depression in the elderly, combination antidepressant and psychotherapy treatment is recommended. (Grade B, Level 1+)

B - Supportive care should be offered to elderly patients and where relevant, their caregivers. (Grade B, Level 1+)

B - Electroconvulsive therapy is indicated in the elderly:

- When the patient is actively suicidal
- When there is an urgent need to prevent deterioration in health (including food/fluid refusal)
- In psychotic depression
- When there is inadequate response to two trials of medication
- When there is intolerance to medication
- When there is good prior response

(Grade B, Level 1+)

Definitions:

Levels of Evidence

Level	Type of Evidence
1++	High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias
1+	Well conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias
1-	Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias
2++	High quality systematic reviews of case control or cohort studies. High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal
2+	Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal
2-	Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal
3	Non-analytic studies, e.g., case reports, case series
4	Expert opinion

Level	Type of Evidence

Grades of Recommendation

Grade	Recommendation
A	At least one meta-analysis, systematic review of randomised controlled trials (RCTs), or RCT rated as 1++ and directly applicable to the target population; or A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and demonstrating overall consistency of results
B	A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 1++ or 1+
C	A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 2++
D	Evidence level 3 or 4; or Extrapolated evidence from studies rated as 2+
GPP (good practice points)	Recommended best practice based on the clinical experience of the guideline development group

Clinical Algorithm(s)

A flow chart for pharmacotherapy of major depressive disorder is provided in the original guideline document.

Scope

Disease/Condition(s)

Depression

Note: Management of depression in bipolar disorder, psychotic depression, and cases with high suicide risk is not included in these guidelines.

Guideline Category

Evaluation

Management

Screening

Treatment

Clinical Specialty

Family Practice

Geriatrics

Internal Medicine

Obstetrics and Gynecology

Pediatrics

Psychiatry

Psychology

Intended Users

Advanced Practice Nurses

Allied Health Personnel

Nurses

Physician Assistants

Physicians

Psychologists/Non-physician Behavioral Health Clinicians

Guideline Objective(s)

To raise awareness and assist in the detection of depression and to ensure that treatment of depression is appropriate and effective

Target Population

Children, adults, pregnant women, and elderly patients with or at risk of depression

Interventions and Practices Considered

Evaluation

1. Assessment of depression, including patient history, mental state examination, physical examination, and laboratory testing
2. Screening for depression using the 9-item Patient Health Questionnaire (PHQ-9)
3. Assessment for coexisting medical conditions

Treatment/Management

1. Referral to a specialist
2. Use of the Clinical Global Impression scales to measure illness severity and treatment progress during consultations
3. Pharmacotherapy
    - Selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs [venlafaxine]), noradrenergic and specific serotonergic antidepressants (NaSSAs, [mirtazapine]), norepinephrine and dopamine reuptake inhibitors (NDRIs, [bupropion]), escitalopram, sertraline, melatonin agonists (agomelatine), tricyclic antidepressants, monoamine oxidase inhibitors (MAOIs)
    - Increasing dose
    - Switching antidepressants
    - Addition of a second antidepressant
    - Benzodiazepine antidepressant combination
    - Maintenance therapy
    - Lithium augmentation and thyroid augmentation
    - Tapering to discontinuation
4. Psychotherapy
    - Cognitive behaviour therapy
    - Interpersonal therapy
    - Psychodynamic psychotherapy
    - Problem-solving therapy

    - Couple/marital therapy
5. Psychoeducation and family intervention
    - Educating the patient
    - Adequate follow-up
    - Lifestyle changes
6. Combined psychotherapy and pharmacotherapy
7. Electroconvulsive therapy
8. Suicide prevention
    - Maintaining contact, ensuring close supervision, and engaging support systems
    - Hospitalisation
    - Self-administered rating scales
9. Management of specific patient populations
    - Children and adolescents
    - Pregnant women
    - Elderly

Major Outcomes Considered

- Relapse and recurrence
- Signs and symptoms of depression
- Occupational and psychosocial function
- Adverse events associated with treatment

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Searches were run on PubMed (1966-2011); EMBASE (1947-2011), the Cumulative Index to Nursing & Allied Health (CINAHL) database (1984-2010) and PsycINFO (1806-2011) for searching evidence related to depression. Additionally both the Cochrane Library (2011, Issue 10) and Centre for Reviews and Dissemination databases (DARE, NHS EED and HTA) were searched for systematic reviews and cost effectiveness studies. The guideline developers also performed Internet search on websites of guidelines agencies and professional societies that published clinical practice guidelines and consensus evidence on the given condition. These include the search for the last five years of the existing clinical practice guidelines (2007-2011) from sources of overseas guidelines agencies and professional bodies, e.g., National Guideline Clearinghouse, National Health Service (NHS) National Library of Guidelines, the Guidelines International Network, Agency for Healthcare Research and Quality (AHRQ), Canadian Medical Association (CMA) Clinical Practice Guidelines, New Zealand Guidelines Group, Australia's Clinical Practice Guidelines Portal websites.

Inclusion/exclusion criteria were used specific to the clinical questions to be answered. In general, search filters were used to further focus the type of studies to randomised controlled trials and systematic reviews of randomised controlled trials. If there is a paucity of higher level evidence, lower level evidence may be considered.

All searches used keywords and MeSH headings or the controlled vocabulary specific to the databases for the condition specified.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Levels of Evidence

Level	Type of Evidence
1++	High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias
1+	Well conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias
1-	Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias
2++	High quality systematic reviews of case control or cohort studies. High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal
2+	Well conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal
2-	Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal
3	Non-analytic studies, e.g., case reports, case series
4	Expert opinion

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

These guidelines have been produced by a committee of psychiatrists, clinical psychologists, pharmacists, medical social worker, patient representative and a family practitioner appointed by the Ministry of Health. They were developed by the adaptation of existing guidelines, by the review of relevant literature and by expert clinical consensus with consideration of local practice.

Rating Scheme for the Strength of the Recommendations

Grades of Recommendation

Grade	Recommendation
A	At least one meta-analysis, systematic review of randomised controlled trials (RCTs), or RCT rated as 1++ and directly applicable to the target population; or A body of evidence consisting principally of studies rated as 1+, directly applicable to the target population, and

Grade	Recommendation
	demonstrating overall consistency of results
B	A body of evidence including studies rated as 2++, directly applicable to the target population, and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 1++ or 1+
C	A body of evidence including studies rated as 2+, directly applicable to the target population and demonstrating overall consistency of results; or Extrapolated evidence from studies rated as 2++
D	Evidence level 3 or 4; or Extrapolated evidence from studies rated as 2+
GPP (good practice points)	Recommended best practice based on the clinical experience of the guideline development group

Cost Analysis

See Section 11 of the original guideline document for a discussion of cost-effectiveness issues.

Method of Guideline Validation

Not stated

Description of Method of Guideline Validation

Not applicable

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

- Screening for depression may be beneficial when it is done in high-risk populations (such as individuals with significant physical illnesses causing disability) where the benefits outweigh the risks.
- The key initial objectives of treatment are:
  - Symptomatic remission of all the signs and symptoms of depression
  - Restore occupational and psychosocial function
  - Reduce the likelihood of relapse and recurrence

Potential Harms

- There are concerns that those who are incorrectly identified as being at risk of depression (false positives) are subjected to unnecessary management or treatment.
- Selective serotonin reuptake inhibitors (SSRIs) may result in or exacerbate hyponatraemia, especially in older people. There are reports of possible increased risk of suicidal thinking in using an SSRI such as paroxetine. SSRIs should be used with caution in children and

adolescents.

- Due to their cardiotoxic adverse effect risks, tricyclic antidepressants (TCA) should be avoided in patients at high risk of cardiovascular disease, arrhythmias and cardiac failure.
- The emergence of suicidal thinking and behaviour, or unusual changes in behaviour should be monitored during the early phases (generally the first 1-2 months) of antidepressant treatment, especially in children, adolescents and young adults between 18 to 24 years old.
- The benefits of using benzodiazepines have to be balanced against the risk of developing dependence, tolerance and increased accident probabilities.
- When switching medications, clinicians should be vigilant for the onset of drug-drug interactions (e.g., serotonin syndrome) and drug discontinuation reaction.
- When discontinuing antidepressants, they should be gradually tapered off instead of suddenly stopped, to reduce side effects of discontinuation.
- Electroconvulsive therapy is generally a very safe treatment. The common side effects of electroconvulsive therapy are transient headaches, muscle soreness, nausea and memory impairment. Following each electroconvulsive therapy treatment is a transient postictal confusional state and a longer period of anterograde and retrograde amnesia. The anterograde memory impairment typically resolves in a few weeks after cessation of electroconvulsive therapy. Some degree of retrograde amnesia, particularly for recent memories, may continue for patients receiving bilateral electroconvulsive therapy. This retrograde amnesia manifests as difficulty remembering information learned prior to the course of electroconvulsive therapy. The risk of death with electroconvulsive therapy is very low, around 1 per 10,000 patients. This rate is comparable to that which would be expected from a series of brief anaesthetic procedures alone. Most deaths occur in high-risk cases, and are usually due to cardiac causes.
- The elderly are more sensitive to the unwanted actions of some antidepressants. Particularly troublesome are peripheral and central anticholinergic effects such as constipation, urinary retention, delirium and cognitive dysfunction, antihistaminergic effects such as sedation and anti-adrenergic effects such as postural hypotension.

Contraindications

Contraindications

Although there is no absolute contraindication to electroconvulsive therapy, certain conditions are associated with greater risk of adverse events. These include recent myocardial infarction, congestive heart failure, cardiac arrhythmia, recent stroke, bleeding or unstable cerebral vascular aneurysm or malformation, phaeochromocytoma, retinal detachment, space occupying lesions in the brain and other conditions leading to raise intracranial pressure. In such situations, the relative risks and benefits of electroconvulsive therapy treatment should be carefully weighed in collaboration with a physician, cardiologist, anesthesiologist, neurologist or neurosurgeon, as the case requires.

Qualifying Statements

Qualifying Statements

- These guidelines are not intended to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge advances and patterns of care evolve.
- The contents of this publication are guidelines to clinical practice, based on the best available evidence at the time of development. Adherence to these guidelines may not ensure a successful outcome in every case. These guidelines should neither be construed as including all proper methods of care, nor exclude other acceptable methods of care. Each physician is ultimately responsible for the management of his/her unique patient, in the light of the clinical data presented by the patient and the diagnostic and treatment options available.
- Evidence-based clinical practice guidelines are only as current as the evidence that supports them. Users must keep in mind that new evidence could supercede recommendations in these guidelines. The workgroup advises that these guidelines be scheduled for review five years after publication, or when new evidence appears that requires substantive changes to the recommendations.
- The guideline draws on the best available evidence for the treatment of depression in pregnancy. However, there are significant limitations to the evidence base, including limited data on the risks of psychotropic medication during pregnancy and breastfeeding, particularly with more recently introduced drugs. No psychotropic drug has marketing authorisation specifically for pregnant or breastfeeding women.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Clinical Algorithm

Quick Reference Guides/Physician Guides

Slide Presentation

Staff Training/Competency Material

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

Singapore Ministry of Health. Depression. Singapore: Singapore Ministry of Health; 2012 Jan. 87 p. [174 references]

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2004 Mar (revised 2012 Jan)

Guideline Developer(s)

Singapore Ministry of Health - National Government Agency [Non-U.S.]

Source(s) of Funding

Singapore Ministry of Health (MOH)

Guideline Committee

Workgroup on Depression

Composition of Group That Authored the Guideline

Workgroup Members: Dr Chua Hong Choon (*Chairman*), Chief Executive Officer, Institute of Mental Health; Ms Chan Lay Lin, Principal Medical Social Worker, Medical Social Work Department, Institute of Mental Health; Mr Chee Kok Seng, Principal Clinical Pharmacist, Community Wellness Centre; Dr Chen Yu, Helen, Head & Snr Consultant Psychiatrist, Dept of Psychological Medicine, KK Women's & Children's Hospital; Dr Chin Swee Aun, Deputy Director (Primary Care), Primary and Community Care Division, Ministry of Health (till 3 Jan 2011); Ms Wendy Chua Pei Ling, Snr Occupational Therapist, Dept of Occupational Therapy, Institute of Mental Health; Dr Calvin Fones Soon Leng, Snr Consultant Psychiatrist, Fones Clinic-Psychological Medicine, Gleneagles Medical Centre; A/Prof Daniel Fung, Chairman Medical Board, Institute of Mental Health, Duke-NUS Graduate Medical School, Division of Psychology, Nanyang Technological University; Ms Khoo Chai Ling, Snr Clinical Pharmacist, Institute of Mental Health; Dr Kwek Seow Khee, Daniel, Snr Consultant, Dept of Medicine, Alexandra Hospital/Jurong Health Services; Clinical Assoc Professor Leslie Lim, Snr Consultant, Dept of Psychiatry, Singapore General Hospital; Ms Joycelyn Ling, Snr Psychologist, Dept of Early Psychosis Intervention Programme, Institute of Mental Health (till 3 Feb 2012); Ms Porsche Poh, Executive Director, Silver Ribbon (Singapore), Regional Vice President (Asia Pacific), World Federation for Mental Health; Adj Associate Prof Sim Kang, Snr Consultant & Deputy Chief, Dept of General Psychiatry, Institute of Mental Health; Dr Alex Su Hsin Chuan, Chief & Snr Consultant, Dept of General Psychiatry, Institute of Mental Health; Ms Tan Bhing Leet, Head & Principal Occupational Therapist, Dept of Occupational Therapy, Institute of Mental Health; A/Prof Tan Chay Hoon, Visiting Consultant, Dept of Psychological Medicine, National University Hospital, Dept of Pharmacology, Yong Loo Lin School of Medicine, National University of Singapore; Adj Assist Prof. Tan Lay Ling, Snr Consultant, Division of Psychological Medicine, Changi General Hospital; Dr Tan Yong Hui, Colin, Assistant Director, Clinical Services, National Healthcare Group Polyclinic; Dr Tay Woo Kheng, Snr Consultant, Division of Psychological Medicine, Changi General Hospital; Adj Asst Prof Clare Yeo, Snr Principal Clinical Psychologist & Head, Dept of Psychology, Institute of Mental Health

Financial Disclosures/Conflicts of Interest

Not stated

Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Singapore Ministry of Health. Depression. Singapore: Singapore Ministry of Health; 2004 Mar. 54 p.

Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) from the Singapore Ministry of Health Web site .

Print copies: Available from the Singapore Ministry of Health, College of Medicine Building, Mezzanine Floor 16 College Rd, Singapore 169854.

Availability of Companion Documents

The following are available:

- Depression. Executive summary of recommendations. Singapore: Singapore Ministry of Health; 2011 Jun. 16 p. Electronic copies: Available in Portable Document Format (PDF) from the Singapore Ministry of Health Web site .
- Schizophrenia and depression in the peripartum. Slide presentation. 23 p. Electronic copies: Available in PDF from the Singapore Ministry of Health Web site .

Screening tools for depressive disorders and the Clinical Global Impression Scale are available in the annexes to the original guideline document .

Self-assessment questions and clinical quality improvement parameters are also available in the original guideline document .

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI on July 6, 2004. This summary was updated by ECRI on August 15, 2005, following the U.S. Food and Drug Administration advisory on antidepressant medications. This summary was updated by ECRI on October 3, 2005, following the U.S. Food and Drug Administration advisory on Paxil (paroxetine). This summary was updated by ECRI on December 12, 2005, following the U.S. Food and Drug Administration advisory on Paroxetine HCL - Paxil and generic paroxetine. This summary was updated by ECRI on May 31, 2006 following the U.S. Food and Drug Administration advisory on Paxil (paroxetine hydrochloride). This summary was updated by ECRI on November 22, 2006, following the FDA advisory on Effexor (venlafaxine HCl). This summary was updated by ECRI Institute on November 6, 2007, following the U.S. Food and Drug Administration advisory on Antidepressant drugs. This NGC summary was updated by ECRI Institute on March 14, 2013. This summary was updated by ECRI Institute on October 21, 2016 following the U.S. Food and Drug Administration advisory on opioid pain and cough medicines combined with benzodiazepines.

Copyright Statement

Disclaimer

NGC Disclaimer